pulse



News from Drexel University College of Medicine

FALL 2023 Vol. 10, No. 4

What's It Like to Move a Medical School? Academic Year Starts at Health Sciences Building

On August 14, more than 400 first- and second-year medical students, along with over 150 Drexel University College of Medicine faculty and staff, began the academic year not at the familiar Queen Lane Campus in East Falls. They began it 6 miles south, in a gleaming, 12-story tower — a newly constructed marvel known as the Health Sciences Building — in the heart of University City.

Much fanfare has accompanied the relocation, which brings together medical students with students from the Graduate School of Biomedical Sciences and Professional Studies as well as the College of Nursing and Health Professions. But what do students, faculty and staff make of the move?

Here, several of them reflect on Queen Lane sentimentality, relocation logistics, newfound advantages and the expanded community that awaits them at the Health Sciences Building.

Safeguarding History

Before she became a Drexel faculty member, Dana Farabaugh, MD, senior associate dean of medical education and professor of obstetrics and gynecology, was a Drexel medical student. It's no surprise that the Queen Lane Campus, where she began her studies, evokes nostalgia. "Teaching classes in the same rooms where you sat as a student was a unique experience. I'll miss that," she says.

Relocating the medical school to University City was not simply a geographical shift. It was a separation — particularly for faculty — from accumulated memories, not to

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Partnership Practice celebrates 30 years of excellence in HIV care



CRISPR Cutout game earns silver medal at Serious Play event



Woman One honors local leaders while supporting students

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Pulse, a publication for students, faculty, staff and alumni of Drexel University College of Medicine, is published four times a year by the Marketing & Communications Department 245 North 15th Street, Room 6328 Philadelphia, PA 19102

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Closing Out an Exciting Year

As we near the end of 2023, it is an opportune time to reflect on our many achievements.

The academic year is underway with our MD and several biomedical graduate programs settled into the Drexel Health Sciences Building in University City. We celebrated this historical move at an event in September. You can see photos from that gathering on page 11. What an honor to bring together so many members of our Drexel colleges and schools, and guests from our affiliates and the community, to enjoy our new space and marvel at the possibilities ahead for interprofessional collaboration in education, research and care.



Charles B. Cairns, MD

The Drexel Health Sciences Building was also the site of two other wonderful celebrations:

On September 22, we marked the 30th anniversary of Drexel's Partnership Comprehensive Care Practice with a half-day symposium. The program featured remarks from current and former Partnership leaders, as well as esteemed experts from local government and nonprofit organizations, and offered insights into both the history and the future of HIV care in Philadelphia and beyond.

The Marion Spencer Fay Award was

presented by the Lynn Yeakel Institute for Women's Health and Leadership to Erica Ollmann Saphire, PhD, MBA, on November 9 at the Health Sciences Building. Dr. Saphire is a renowned virologist who serves as president and CEO of the La Jolla Institute for Immunology. She gave a lecture, "How to Turn Competitors Into Collaborators," which was followed by an award ceremony and reception.

The Yeakel Institute also celebrated the achievements of two remarkable women leaders, while raising scholarship funds for underrepresented medical students, at the Woman One Award ceremony on October 5. Ala Stanford, MD, the founder of the Black Doctors COVID-19 Consortium and the Center for Health Equity in North Philadelphia, was honored for her leadership and commitment to eliminating health inequities and bringing care to marginalized people. Ellen Yin, MBA, recipient of this year's James Beard Foundation Outstanding Restaurateur Award and founder of the High Street Hospitality Group, was honored for her success as a restaurateur and her dedication to community leadership.

Finally, I am pleased to announce that Mark Woodland, MS, MD, was appointed to a new role — associate dean, advocacy and policy — effective September 1. Dr. Woodland has been a faculty member of our College of Medicine for nearly three decades, having served as interim chair of the Department of Obstetrics & Gynecology, program director of the Obstetrics & Gynecology Residency, and vice dean for graduate medical education as well as faculty for professionalism and bioethics courses. As associate dean of advocacy and policy, he is tasked with collaborating with departments, affiliate institutions and practices to identify key areas for advocacy and policy development to positively impact both the academic and clinical learning environment for current and future clinicians.

As always, I thank you all for your dedication to excellence, leadership and engagement. As we look forward to what lies ahead in 2024 and beyond, I wish you a safe and joyous holiday season and a happy new year.

Charles B. Cairns, MD

Walter H. and Leonore Annenberg Dean Senior Vice President of Medical Affairs

Destination Excellence

Student Groups Lead and Learn at APAMSA and SNMA Events

The College of Medicine's Asian Pacific American Medical Student Association (APAMSA), in partnership with other APAMSA chapters in the Northeast, came together on September 16 for their annual regional conference, held this year at Temple University. Attendees included pre-health students, medical students and residents from Temple, Drexel, the University of Pennsylvania, Johns Hopkins, Cooper, Georgetown, Sidney Kimmel, Penn State and more. Hosted in collaboration with Temple's Pre-Med APAMSA chapter and the APAMSA National Board, this event served as a platform for dialogue and collaboration in the realm of health care, diversity and cultural competence.

Offering a range of presentations on the Asian American, Native Hawaiian and Pacific Islander (AANHPI) experience, the conference's theme was

"Healing Our Past: Nurturing AANHPI Advocacy and Visibility." The conference featured keynote speaker Lin Zhu, PhD, a professor at the Lewis Katz School of Medicine, who presented "Unified in Our Diversity to Improve Health Equity in AANHPI Communities." Thoin Begum, PhD, from Temple's Center for Asian Health, presented on DEI advocacy and leadership, Xiaoxi Ouyang, MD, a child and adolescent psychiatrist from Georgetown, discussed the upbringing and culture of AANHPI populations, and Esther Hio-Tong Castillo, PhD, the director of racial equity, storytelling and community impact, Office of Community

Empowerment and Opportunity in the City of Philadelphia, discussed mental health initiatives and advocacy. The final speaker of the conference was Mohan Seshardi, the executive director of the Asian Pacific Islander Political Alliance (API PA), who discussed the fight to save Chinatown from building developers.

Resident and pre-health panels were held for medical students and pre-health students, respectively. Included in the pre-health panel was Madhu Badri, MD '26, from the College of Medicine at Tower Health in West Reading, who was able to share her journey to medicine. "They had a lot of interesting questions for me, such as asking me how my Asian parents dealt with me taking additional gap years before going into medical school, a concept that wasn't common in their upbringing. It made me reflect and realize the unique viewpoint that I could share with pre-med students that had a similar cultural background to me," Badri said.

The 2023 Region 3 APAMSA Conference was a resounding success, building new bridges within the AANHPI medical community. Attendees left with not only a wealth of knowledge, but also with a strengthened sense of community and a shared commitment to creating a more inclusive and culturally competent health care landscape.

- Stephen Chien, MD '26

On October 21, Drexel University College of Medicine's Student National Medical Association (SNMA) had the honor of hosting Region VIII's Leadership Institute (RLI). RLI was originated by Leon McCrea II, MD, MPH, senior associate dean of diversity, equity and inclusion. He established the event during his tenure as the SNMA Region VIII director while

> attending the University of Pittsburgh School of Medicine. This conference aims to enhance the leadership skills of SNMA and MAPS (Minority Association of Pre-Medical Students) leaders and general members through educational seminars. This year's theme was "The Transformative Art of Leadership: Changing Values Into Action."

The keynote speaker, Yanick Vibert, DO, assistant professor of pediatrics, truly embodied this theme, emphasizing the importance of honoring your story, including the highs, the lows and the unforeseen. She highlighted that the hardships people endure on their path to medicine not only make them who they are, but also the physicians they

aspire to become. Her speech was both impactful and inspiring, captivating all in attendance.

The conference also included a resident panel with physicians in family medicine, physical medicine and rehabilitation, anesthesiology and general surgery. The organizers were honored to have College of Medicine MD program and Drexel Pathway to Medical School (DPMS) alumni, Aderinsola Aderonmu, MD '23, MS, '19, and Adrian Oppong, MD '22, in attendance. The panelists offered wonderful guidance about the resident application process and discussed how to exercise leadership skills in clinical practice when advocating and caring for patients.

Drexel University College of Medicine's SNMA Chapter enjoyed hosting all in attendance and was honored to support current and future underrepresented minority medical students.

> - Jazmin Belton, MD '26, and Michelle Davis, MD '26



Second-year MD students and SNMA co-presidents Jazmin Belton, Ferdinand Anumba and Michelle Davis

Health Sciences Building

· continued from the cover

mention from a powerful campus history. The Queen Lane Campus was originally home to the Medical College of Pennsylvania, founded in the 1850s as the Female Medical College of Pennsylvania, the first degree-granting medical school for women in the world. Also central to the campus's history was Hahnemann University, founded in 1848 as the Homeopathic Medical College of Pennsylvania, the country's first medical school focused on homeopathy. In 2002, halfway through Farabaugh's time as a student, Drexel officially assumed management of the two entities, giving rise to Drexel University College of Medicine.

Preserving this groundbreaking health science history is top of mind for Margaret Graham, director of the Legacy Center Archives and Special Collections. Located at the Queen Lane Campus, it houses the school's records and heritage. "From a historical perspective, the relocation is less about moving away from Queen Lane and more about bringing the history of the school to the Health Science Building," she explains. "My goal is to keep that history visible so it's not lost."

To that end, she and others in the Legacy Center were hard at work over the summer creating a temporary mural project, currently on display on the first, second, third, ninth and 12th floors of the building. While there are no immediate plans for the Legacy Center to join in the move to University City, Graham looks forward to partnering with a diverse advisory group as well as others in the College of Medicine community to create a more permanent archival installation.



At a September welcome event, Legacy Center archivist Matt Herbison shared archival materials with attendees, including Dean Charles B. Cairns, MD, and Senior Vice Dean for Faculty Nancy Spector, MD.

Where Will We Park?

With such a major change to routines, there were uncertainties about parking and commuting. Farabaugh recalls, "We were very comfortable and familiar with East Falls, and change can be hard."

Emerson Rowe, MD '26, who opted to remain living in East Falls after the relocation, remembers that the idea of the Health Sciences Building — and access to one of the most state-of-the-art medical facilities in the Northeast — was highlighted when he applied to Drexel. As the move drew closer, he and his classmates started to consider the implications. "We were curious about the logistics, wondering how we would commute, where we would take exams, if we would have access to the same libraries," he recalls.

In anticipation of the transition to the new building, Shray Jain, MD '26 moved from East Falls to Center City in June. As a first-year, he got to Queen Lane for classes within minutes. Now, using the Dragon Route shuttle, he arrives at the Health Sciences Building in about 25 minutes. The longer commute is worth it, he says. "I was excited to move to a different environment. Here, we get exposure to more of the city. And there's definitely excitement to see what the new building can offer."

At Home in the Health Sciences Building

Depending on who you ask, moving into the 460,000-square-foot building was either seamless or logistically complex. For faculty, crates were delivered to Queen Lane offices, and essential files and computers were loaded in. A few days later, everything was neatly delivered to newly furnished offices in the Health Sciences Building.

For Tiffany Davis, EdD, director of the Clinical Education Assessment Center (CEAC) and Standardized Patient program, the move was years in the making. With oversight of the operation and staffing of mock exam rooms in which students practice their clinical skills, Davis was on the building's Planning and Building Committee for two years leading up to the move. She and her team wanted to ensure the new CEAC training space was custom designed to meet students' needs. While most furniture is new, some chairs, exam tables, and other supplies and medical equipment had to be packed up, carted downtown and rearranged in the CEAC's new space. Now, students have a total of 18 exam rooms at their disposal, up from 13 at Queen Lane, where they often had to share space with the Simulation Center. The room increase, not to mention their modern, bright appearance and improved air circulation, are significant improvements, Davis says. Indeed, the massive windows channeling ample natural light are routinely cited as a welcome feature of the Health Sciences Building.

Another notable attribute of the location, which students are quick to cite: Easy access to an array of food options, including a Dunkin' Donuts beside the Health Sciences Building's entrance and an airy café just inside its lobby.

Still, Rowe remembers experiencing some degree of culture shock, transitioning from a homey, suburban campus teeming with inviting flower beds to a vibrant metro area. It wasn't long before he was won over. With a background in physical therapy and an interest in pursuing orthopedic surgery, Rowe is particularly impressed by the new anatomy lab and bone room, both on the 12th floor. Where Queen Lane's dissection space was



Mario the Magnificent was on hand at the Health Sciences Building during MD student orientation to welcome the incoming class of 2027.

basement-level, the Health Sciences Building's is light-filled and capacious, with oversized touch screens that allow for intricate 3D dissections. Beside the lab, a bone room filled with 3D-printed models and bone boxes containing every piece of human anatomy allow for careful examination and practice. "Having this level of access to anatomic resources is a huge asset," he says.

Talmadge Gaither, MD '26, who plans to focus his medical training in urology, cites proximity to the resources of University and Center City as a significant advantage. "Drexel doesn't have a home program for urology, so being closer to Penn, Temple and Jefferson makes collaboration a lot easier," he notes.

With more shared lounge areas and study spaces, collaboration and connection are happening inside the Health Sciences Building, too. Farabaugh points out that at Queen Lane, faculty offices were tucked away on one side of the building, separating them from students. The open layout of the building eases communication and interaction among students and educators, she says. "When you walk through the new building, you see and hear people, there's space to congregate. You feel like you're part of a community."

What's more, because students and faculty from all three schools are housed in the same building, that sense of community is not only accentuated, but facilitated. For several years Farabaugh has hosted interprofessional educational sessions with the College of Nursing and Health Professions. Given geographical constraints, they have always occurred via Zoom. Now that students share the same space, she's eager to see those sessions take place in person.

New Community, Greater Impact

To be sure, some aspects of Queen Lane will be missed. Transporting a few beloved items from the old campus to the new has helped to make the new space feel more like home. "We kept the ping pong tables," jokes Rowe. "That was a must for the medical students. The pool table, too.'

But all in all, as the College's faculty and staff — the final cohort to occupy the Health Sciences Building — settle in, excitement and promise are palpable.

Gaither, who works at the Legacy Center and has developed a deep appreciation for the College's history and origins, captures the sentiments of many. "I'm grateful to have experienced the Queen Lane Campus. And I'm equally excited for the opportunity to experience the Health Sciences Building and to be a part of the College of Medicine community as it begins its next chapter."

That excitement extends to the highest ranks of the school community. Dean Charles B. Cairns, MD, shares, "The opening of the new Health Sciences Building constitutes a momentous milestone for Drexel, one that positions students and faculty more squarely at the forefront of educational opportunity, interprofessional partnership and overall impact. That impact will be noticeable not only within our own school community, but importantly, throughout the Greater Philadelphia area and beyond."

As a former Queen Lane medical student, Farabauah can relate to the sense that the East Falls location was separate from the greater Drexel community. Upending those feelings is what excites her most about the College's new home. "The potential, the opportunity and the experiences that the Health Sciences Building will bring for the students, that's what I'm really looking forward to," she says. "Not only educationally, but socially, too, helping them to feel more fully part of the larger Drexel community. The effect of that integration will be tremendously positive for all of us."

- Andrea Dawson

FAVORITE HEALTH SCIENCES BUILDING STUDY NOOKS

"Restaurant-style" study booths on the fourth floor.

Shray Jain, MD '26

Large conference room in the far corner of the ninth floor, where he can watch the sun set over the city.

Talmadge Gaither, MD '26

Still visits the Queen Lane library, on occasion.

Emerson Rowe, MD '26

Partnership Comprehensive Care Practice Celebrates 30 Years of Service

On Friday, September 22, clinicians, researchers, community outreach professionals, patient advocates, public health officials and guests gathered to celebrate the 30th anniversary of the Partnership Comprehensive

Care Practice at a symposium, entitled "The Partnership: Then & Now." The gathering took place at Drexel's Health Sciences Building in University City. The program featured remarks from current and former Partnership leaders, as well as esteemed experts from local government and nonprofit organizations.

The event opened with a welcome from Charles B. Cairns, MD, the Walter H. and Leonore Annenberg Dean of the College of Medicine and senior vice president of medical affairs at Drexel, followed by opening remarks from Marla Gold, MD, founder of the Partnership and former senior vice provost for community health and chief wellness officer, Drexel University. Gold looked back on the early days of the clinic and the state of HIV care 30 years ago, recalling that "care was fragmented" at the start of the epidemic.

Amy Althoff, MD, medical director at the Partnership and associate professor of medicine at the College of Medicine, highlighted the Partnership's more recent history, including the impact of COVID-19 and the closure of Hahnemann University Hospital on the clinic, noting that these challenges were a cause for reflection and growth. Today, the clinic is a place where patients can access medical, behavioral health, social, nutrition and pharmacy services, all in ways that honor all patients' lived experiences and identities.

In her presentation, "Ending the HIV Epidemic," Anna Thomas-Ferraioli, MPH, Ending the HIV Epidemic (EHE) advisor at the Philadelphia Department of Public Health, discussed Philadelphia's EHE goals, which include reducing the number of new HIV infections by 75% by the year 2025, using the pillars of "Diagnose, Treat, Prevent and Respond." She also described new endeavors around transitional housing and caring for older adults with HIV.

Gregg Alleyne, MD, a clinician at the Partnership for 25 years, was honored for his dedication to caring for HIV-positive patients. Numerous current and former colleagues spoke

about his years of excellence as a clinician. Alleyne addressed the gathering with gratitude. "My team has been my rock over the last few years," he said, adding that his greatest inspiration was his patients: "My

patients have been with me, taught me and raised me. And that's really important. We must never forget that that's the whole point of what we're doing."

The symposium closed with a panel discussion. Panelists included:

- Sara K. Schultz, MD '10, associate professor of medicine and director, Infectious Diseases Fellowship program, Temple University, Lewis Katz School of Medicine
- Sebrina Tate, MSW, executive director, Bebashi – Transition to Hope
- Vanessa Ferrel, MD, MPH, assistant professor of medicine, Drexel University College of Medicine, and physician, Partnership Comprehensive Care Practice
- Janell Johnson Washington, HIV community activist and a member of the Community Advisory Board at the Partnership Comprehensive Care Practice
- Anna Thomas-Ferraioli, MPH, Ending the HIV Epidemic advisor, Philadelphia Department of Public Health, Division of HIV Health

They reflected on their journeys to becoming involved in the HIV care community, and addressed the relationship between historical activism efforts and ongoing ones, mitigating barriers to care for marginalized people, ways to improve public education around HIV care, and what gives them hope as they look to the future.



Anna Thomas-Ferraioli, MPH



Gregg Alleyne, MD, and Amy Althoff, MD



Carolynn Rainey, MS, Partnership clinic director, and Marla Gold, MD



The PECO Building crown lights celebrating the 30th anniversary milestone in Philadelphia

Conversations That Matter: The College of Medicine's Diversity, **Equity & Inclusion Podcast**

We invite you to listen to "Conversations That Matter," a podcast in which Leon McCrea II, MD, MPH, senior associate dean of diversity, equity and inclusion, interviews members of the College of Medicine community about their lives, their journeys in medicine, and their thoughts on diversity in medical practice and education.

These conversations cover a range of topics, including increasing inclusivity in the workplace, ensuring equitable patient care, improving the experiences of bilingual health care providers and patients, creating inclusive spaces for queer and transgender people, the meaning and importance of holistic student affairs, and finding community through shared backgrounds, just to name a few.

Also be sure to tune in for guests' thoughts on the best restaurants in East Falls, the fish hoagie as a classic Philadelphia food, where to get vegan food in Pittsburgh and the finest takeout in Bryn Mawr.

Recent guests have included:

- Seema Baranwal, MD, associate professor, Department of Medicine; senior associate dean for student affairs
- Rita Guevara, MD, assistant professor, Department of Pediatrics; assistant dean of diversity, equity and inclusion
- Justin Camacho, MD '25, and Julianna Kinsolving, MD '25, co-presidents, Latino Medical Student Association
- Janet Cruz, MD, assistant professor, Department of Family, Community & Preventive Medicine
- Annette Gadegbeku, MD, associate professor, Department of Family, Community & Preventive Medicine; associate dean, community health; faculty director, Healing Hurt People
- Margaret Larkins-Pettigrew, MD, MEd, MPPM, professor and academic chair, Department of Obstetrics & Gynecology, and chief clinical diversity, equity and inclusion officer, Allegheny Health Network
- Maryssa Lyons, MD, general psychiatry resident, Tower Health - Phoenixville Hospital

Learn more at bit.ly/3AxL4QJ.



















College of Medicine Offers Insight, Empowerment at Esperanza Symposium

Students from the College of Medicine and the Graduate School of Biomedical Sciences and Professional Studies volunteered at Esperanza College of Eastern University on October 13, for a "Minorities in Health Sciences" Symposium for high school students. The event was conceived by Sara Sabatino Solomon, MS, human anatomy labs program manager, who had a prior relationship with Esperanza and saw the opportunity to connect motivated members of the Drexel community with students who could benefit from hearing about their experience and knowledge. Faculty members Bill Frank, DC, and Ramesh Raghupathi, PhD, both from the Department of Neurobiology & Anatomy, also participated. During the event, the volunteers served as panelists, discussing their backgrounds as minorities in health care and research, and performed hands-on activities with attendees.

Student volunteers included:

- Shirley Barrera, Microbiology & Immunology PhD Program
- Ana Barrero Barrera, MD '26
- Sophie Cohen, Neuroscience PhD Program
- Bridie Eckel, Neuroscience PhD Program
- Arron Hall, Neuroscience PhD Program
- Jill Lawrence, Molecular & Cell Biology & Genetics PhD Program
- Ashley Opalka, Neuroscience PhD Program
- Johanna Rivas, MD '26
- Julie Schaub, Neuroscience PhD Program









Mark Woodland to Lead Advocacy and Policy Efforts

Mark B. Woodland, MS, MD, clinical professor, Department of Obstetrics & Gynecology, was appointed to a new role as associate dean, advocacy and policy effective September 1, 2023.

Woodland has been a faculty member at the College of Medicine for nearly three decades, having served as OB-GYN residency program director and vice dean for graduate medical education as well as faculty for professionalism and bioethics courses. He joined Reading Hospital – Tower Health as chair of obstetrics and gynecology in 2015 and serves as the Women's Health Service Lead for the Tower Health Medical Group. Additionally, he was appointed by Governor Wolf in 2022 to his second term on the PA State Medical Board and currently serves as chair.

Woodland's leadership during his time as interim academic chair of OB-GYN for the College of Medicine has helped to stabilize and ensure the continued success of the department by collaborating with our affiliates to bolster clerkships and rotations, recruiting and promoting faculty, and enhancing the

student experience through leadership of interest groups and support of fourth-year pathway activities. His regional and national leadership presence with organizations including the Accreditation Council for Graduate Medical Education (ACGME), the Association of American Medical Colleges (AAMC), the Association of Professors of Gynecology and Obstetrics (APGO), the Council on Resident Education in Obstetrics and Gynecology

(CREOG) and the American College of Obstetrics and Gynecology (ACOG) has been invaluable to Drexel's education and training missions.

As associate dean of advocacy and policy, he is tasked with collaborating with departments, affiliate institutions and practices to identify key areas for advocacy and policy development to positively impact both the academic and clinical learning environment for current and future clinicians. He works with partners in the Offices of Faculty, Diversity, Equity & Inclusion, Educational Affairs, Government Relations, and Community Health

& Health Equity to develop programming and processes that support advocacy and policy successes, unify clinical advocacy efforts across the regional and affiliate campuses, and promote interdisciplinary collaboration across Drexel's colleges and schools.



Commonwealth Rewards Collaboration With CURE Grants

The Commonwealth Universal Research Enhancement (CURE) Program funds collaborative biomedical research that aims to improve the health of Pennsylvanians through Formula CURE Grants. Below are the funded Drexel projects that include one or more College of Medicine collaborators. A full list can be found at bit.ly/DrexelCURE:

Trial of Intervention in Young Children With Autism Spectrum Disorder

Principal Investigator:

- David Bennett, PhD, Psychiatry, College of Medicine Co-investigators:
 - · Hasan Ayaz, PhD, School of Biomedical Engineering, Science and Health Systems
 - Karen F. Heffler, MD, Psychiatry, College of Medicine
 - Elisabeth Sheridan, PhD, A.J. Drexel Autism Institute
 - Chloe Silverman, PhD, Politics, College of Arts & Sciences

Role of Fam99 Members in Hepatocyte Physiology and Liver Cancer Biology

Principal Investigator:

• Śrinivas Somarowthu, PhD, Biochemistry & Molecular Biology, College of Medicine

Co-investigators:

- Michael J. Bouchard, PhD, Biochemistry & Molecular Biology, College of Medicine
- · Joris Beld, PhD, Microbiology & Immunology, College of Medicine

Neuroimmune Regulation of Nociceptive and Affective Pain After Spinal Cord Injury

Principal Investigator:

· Megan R. Detloff, PhD, Neurobiology & Anatomy, College of Medicine

Co-investigators:

- John R. Bethea, PhD, Biology, College of Arts & Sciences
- Wen-Jun Gao, MD, PhD, Neurobiology & Anatomy, College of Medicine

Sex Differences in Neuropathic Pain: The Role of Glutamate Transporters

Principal Investigator:

 Andréia C. K. Mortensen, PhD, Pharmacology & Physiology, College of Medicine

Co-investigator:

· Seena Ajit, PhD, Pharmacology & Physiology, College of Medicine

Can Functional Near Infrared Spectroscopy Predict Weight Loss/Maintenance Success

Principal Investigator:

• Jennifer A. Nasser, PhD, RD, Nutrition Sciences, College of Nursing and Health Professions

Co-investigators:

- Hasan Ayaz, PhD, School of Biomedical Engineering, Science and Health Systems
- · Michael Bruneau, PhD, Health Sciences, College of Nursing and Health Professions
- Meera Harhay, MD, MPH, College of Medicine

Examining the Brief Family Intervention for MOUD Adherence Among Women

Principal Investigator:

• Jessica Chou, PhD, Behavioral Health Counseling, College of Nursing and Health Professions

Co-investigators:

- David Bennett, PhD, Psychiatry, College of Medicine
- · Joke Bradt, PhD, Creative Arts Therapy, College of Nursing and Health Professions
- · Barbara Schindler, MD, Psychiatry, College of Medicine
- · Sharlene Irving, MBA, Psychiatry, College of Medicine

Integrative Intervention With Creative Arts Therapies and Nutrition- I2CAN

Principal Investigator:

• Deeptha Sukumar, PhD, Nutrition Sciences, College of Nursing and Health Professions

Co-investigators:

- · Girija Kaimal, EdD, Creative Arts Therapy, College of Nursing and Health Professions
- Erica M. LaFata, PhD, Well Center, College of Arts & Sciences
- · Patricia Shewokis, PhD, Nutrition Sciences, College of Nursing and Health Professions
- Mark Woodland, MS, MD, Obstetrics & Gynecology, College of Medicine

Local Delivery of Folic Acid to Promote Spinal Cord Repair

Principal Investigator:

• Yinghui Zhong, PhD, School of Biomedical Engineering, Science and Health Systems

Co-investigator:

• Veronica Tom, PhD, Neurobiology & Anatomy, College of Medicine

CRISPR Cutout Earns Serious Play Award

The CRISPR Cutout™ game was awarded a silver medal at the 2023 International Serious Play Award competition in Toronto, Canada. CRISPR Cutout is the fourth in a series of mobile educational games developed by the Institute for Molecular Medicine and Infectious Disease. The game introduces the molecular mechanisms of the cutting-edge genome editing technology called CRISPR, which stands for clustered regularly interspaced short palindromic repeats. Players create a gene-editing tool to use in a cell to cut out a sequence of HIV DNA. Two guides called Crispy and G teach players how CRISPR is created and how it can be used in editing DNA to cure disease.



Bristol Myers Squibb Grants Boost Cell and Gene Therapy Education

The College of Medicine and the School of Biomedical Engineering, Science and Health Systems have received grants from the pharmaceutical company Bristol Myers Squibb (BMS) to support the education and training of diverse and talented students looking to pursue careers in cell and gene therapy.

The funding provided nearly \$1 million to support the creation of a Cell and Gene Therapy Technology, Engineering, Analytics, Manufacturing & Science academic program, known as CGT-TEAMS, that launched this summer for undergraduate and graduate students enrolled in the two schools.

In addition to a curriculum development grant, there is funding to support outreach and scientific educational programming for high school students and professional development for high school teachers in Philadelphia, as well as to support Drexel CGT-TEAMS students to pursue co-op experiences at BMS.

CGT-TEAMS will start as a concentration with 30 credits

in cell and gene manufacturing, regulatory requirements, analytical techniques, immune engineering, genomics and informatics, and other topics. After a trial period, the concentration will be developed into a minor, available to all undergraduate and graduate students.

A 2020 study¹ by Econsult Solutions Inc., commissioned by the CEO Council for Growth, the University City Science Center and University City District's West Philadelphia Skills Initiative, concluded that jobs in cell and gene therapy and "connected health" are projected to grow in the Philadelphia region between 35% and 94% over the next 10 years. The report found that mid-range growth estimates will stand at roughly 2,000 to upwards of 7,600 new jobs.

"We're proposing an educational model in which our students can directly impact the biomedical industry with unique inroads not offered elsewhere," says Charles B. Cairns, MD, Walter H. and Annenberg Dean of the College of Medicine and senior vice president of medical affairs for Drexel. "Having these students' work at Drexel magnified further in lab settings at BMS is especially rewarding. We're laying the groundwork now for incredible career opportunities ahead for these students."

Reference:

1. https://www.bizjournals.com/philadelphia/news/2020/05/14/cell-and-gene-therapy-philadelphia-job-growth.html

ELAM/ELH Programs Foster Leadership at Drexel and Beyond

The Executive Leadership in Academic Medicine (ELAM) and Executive Leadership in Health Care (ELH) programs welcomed a record number of fellows in their 2023-2024 programs: 96 ELAM fellows and 45 ELH fellows. Among their ranks are four Drexel faculty members:

- Jan Eberth, PhD, professor and chair, Department of Health Management and Policy, Dornsife School of Public Health
- Annette Gadegbeku, MD, associate professor, Department of Family, Community & Preventive Medicine; associate dean, Community Health; faculty director, Healing Hurt People
- Sandhya Kortagere, PhD, professor, Department of Microbiology & Immunology
- Margaret Larkins-Pettigrew, MD, MEd, MPPM, professor and academic chair, Department of Obstetrics & Gynecology



Nancy Spector, MD, executive director of the ELAM and ELH programs (center), with current Drexel fellows (left to right) Gadegbeku, Kortagere, Eberth and Larkins-Pettigrew

Drexel Medicine Diagnostics Laboratory Earns Reaccreditation Through CAP

Drexel Medicine Diagnostics Laboratory received reaccreditation from the College of American Pathologists (CAP) for a period of two years. The lab, created early in the pandemic to provide COVID-19 testing, received its initial accreditation within about a year of its founding. The lab has since expanded to offer a range of services, including microbiology, toxicology screens, and viral and

bacterial testing including for tickborne infections, as well as continuing to offer COVID-19 testing.

The CAP accreditation process uses established performance standards and a dynamic, collaborative process to enhance service quality and foster an environment of ongoing improvement in clinical laboratories. Their accreditation letter congratulates the entire Drexel Medicine Diagnostics Laboratory team for their achievement, noting that "together you provide excellence in laboratory medicine services." It goes on to thank the team for their "commitment to continuous quality improvement."







Welcome Reception and Tours Draw Campus and Community Members to Health Sciences Building

On September 27, guests including faculty and professional staff from several Drexel schools and colleges, College of Medicine affiliates, and members of the community gathered at the Health Sciences Building for an event that included a reception and tours of the new space. Staff from the Legacy Center Archives and Special Collections were on hand to present archival materials representing the College's history.



Philadelphia Luminaries Honored With Woman One Awards

Local leaders Ala Stanford, MD, and Ellen Yin, MBA, received Woman One Awards from the Lynn Yeakel Institute for Women's Health and Leadership on October 5, 2023, during a ceremony at Le Méridien in Philadelphia. Stanford, the founder of the Black Doctors COVID-19 Consortium and the Center for Health Equity in North Philadelphia, was honored for her leadership and commitment to eliminating health inequities and bringing care to marginalized people. Ellen Yin, recipient of this year's James Beard Foundation Outstanding Restaurateur Award and founder of the High Street Hospitality Group, was honored for her success as a restaurateur and her community leadership.

The Woman One Award and Scholarship Fund annually honors a person of exceptional leadership and raises tuition funds for talented underrepresented students at Drexel University who are committed to practicing medicine in underserved communities and promoting women, and all underrepresented communities, in medicine. To learn more about Woman One and see photos from the event, visit drexel.edu/medicine/womanone.







SAMHSA Funding Offers Support to Formerly Incarcerated Women

The Caring Together Program received a five-year, \$2 million award from the Substance Abuse and Mental Health Services Administration for the project "Expanding the Working Together for Women Program: Enhancing Family-Based SUD Treatment and Recovery Support." Working Together for Women is a traumainformed, addiction and psychiatric recovery-focused treatment program for women reentering communities after incarceration. The grant's principal investigator is David Bennett, PhD, professor of psychiatry; Sharlene Irving, MBA, program director of Working Together for Women and Caring Together, will be instrumental in the program's implementation.

The funds will support Caring Together's engagement of 330 women with a history of substance use disorder

who are incarcerated in the Philadelphia Department of Prisons and are within four months of release. The participants will be offered addiction and psychiatric treatment, forensic peer support, comprehensive case management, and family reunification and psychoeducation services during reentry and beyond.

These services will help to address the many challenges faced by women reentering the community after incarceration, which include lack of access to genderresponsive treatment programs, lack of support in addressing reentry needs like housing and transportation, difficulties reuniting with families and children, the need for education and vocational assistance, and the complexities of navigating the criminal justice system.

The objectives of the intervention are to increase the number of women engaged in treatment and improve their access to support services. The broader aims are to positively impact the participants' recovery, family engagement, and psychiatric and health status, while reducing recidivism.

Recent Thesis Defenses

We congratulate the following master's and PhD students from the Graduate School of Biomedical Sciences and Professional Studies on the successful defense of their theses.



Mohammed Sani Alhassan

Pharmacology & Physiology MS Program Title: Evaluation of CD 137 in Multiple

Co-advisors: Alessandro Fatatis, MD, PhD, and Bradley Heidrich, PhD



Kelvin L. Koser

Molecular & Cell Biology & Genetics MS Program

Title: Using Accessory Gene Content to Predict the Clinical Isolation Source of Haemophilus influenza Genomes Advisor: Joshua Chang Mell, PhD



Zahra Charania

Molecular & Cell Biology & Genetics MS Program

Title: Identifying Conserved Regions in IncRNA SChLAP1

Advisor: Srinivas Somarowthu, PhD



Xiaonan Liu

Pharmacology & Physiology PhD Program Title: Dissecting the Molecular and Cellular Mechanisms of Neuronal Morphogenesis

in Mouse Cortical Neurons Advisor: Kazuhito Toyooka, PhD



Justin Do

Cancer Biology MS Program Title: Modifying the Epigenome to Facilitate Transdifferentiation of Adult Human Skin Fibroblasts

Advisor: Christian Sell, PhD



Teresa LuPone

Microbiology & Immunology PhD Program Title: Development of a High Throughput High Content Imaging Viral Titer Assay to Investigate the Effect of Substance Misuse on HIV-1 Replicative Dynamics in hMDMs

Advisor: Peter J. Gaskill, PhD



Tara Fortino

Molecular & Cell Biology & Genetics PhD Program

Title: Spinal Interneuron Transplantation to Repair the Injured Cervical Spinal Cord

Advisor: Michael Lane, PhD



Jennifer Lynch

Cancer Biology MS Program Title: CX3CR1 Regulation and Signaling During Phenotypic Plasticity of Prostate

Cancer Cells

Advisor: Alessandro Fatatis, MD, PhD



Celina Guzman

Pharmacology & Physiology MS Program Title: Evaluation of the Functional Performance of KLK2 Chimeric Antigen Receptor (CAR) T Cell Designs Advisors: Ruby Chan, PhD, and

Alessandro Fatatis, MD, PhD



Shabnam Pirestani

Cancer Biology MS Program Title: AURKA Control of PD-L1 Expression

in Head and Neck Cancer Advisor: Erica Golemis, PhD



David Joyner

Molecular & Cell Biology & Genetics MS Program

Title: Improved HIV-Specific T Cell Immunity Following Adenosine Deaminase-1

Co-delivery in Preclinical Models of Vaccination

Advisor: Elias Haddad, PhD



Jonathan William Snyder

Pharmacology & Physiology PhD Program Title: Pancreatic Islet GRK2 Regulates Hormone Secretion and Glycemic Control by Regulating Metabolism and GPCR Sensitivity

Advisor: Priscila Sato, PhD



Hayley Klingenberg

Microbiology & Immunology MS Program Title: Preclinical Assessment of the Immunogenicity, Durability and Efficacy Induced by Pre-erythrocytic Stage Vaccines Against Plasmodium falciparum Malaria Advisor: James Burns Jr., PhD



Meagan Tomasso

Biochemistry PhD Program Title: Cdc42EP3-Bound Septin Filaments Promote Actin Filament Assembly

Advisor: Shae Padrick, PhD

Keziah Adjei, Molecular Medicine master's program student, was awarded a Van Duuren Fulbright travel grant to attend the American Society of Tropical Medicine and Hygiene conference in Chicago from October 18-22, 2023. The award provides funds for travel-related educational expenses to recipients studying in the fields of sciences and public health. Adjei also recently had her P.E.O. Peace Scholarship renewed.



Peter Baas, PhD, professor, Department of Neurobiology & Anatomy, received a \$150,000 grant from the Spastic Paraplegia Foundation for his project "Antisense Oligonucleotide Therapy for SPG4-HSP." Baas was also selected to receive a Louis and Bessie Stein Family Fellowship from

the Drexel University Office of Global Engagement.

Dorothy Benton, a PhD student in the Molecular & Cell Biology & Genetics program, and her mentor **Jonathan** Chernoff, PhD, of Fox Chase Cancer Center, authored "Trimming Away Colon Cancer: TRIM21-Mediated Ubiquitination as an Activator of the Hippo Tumor Suppressor Pathway" in Cell Chemical Biology on July 20, 2023.

Sushil Beriwal, MD, clinical professor of radiologic sciences, was among the authors of a number of recent papers: "Three Discipline Collaborative Radiation Therapy (3DCRT) Special Debate: Radiation Oncology Has Become So Technologically Complex That Basic Fundamental Physics Should No Longer Be Included in the Modern Curriculum for Radiation Oncology Residents," an editorial that appeared in the Journal of Applied Clinical Medical Physics on August 22, 2023; "A Practical Guide to Hybrid Interstitial/Intracavitary Brachytherapy for Locally-Advanced Cervical Cancer," published in the September-October issue of Brachytherapy; "Cost-Effectiveness Analysis of Tumor Molecular Testing in Stage III Endometrial Cancer," which appeared in the June 2023 issue of the journal Gynecologic Oncology; and "Is Substantial Lymphovascular Space Invasion Prognostic in Patients With Pathologically Lymph Node-Negative

Council on Chemical Abuse Honors MD Students' Naloxone Distribution

Three second-year MD students, Tom Parker, Carter Van and Marquis Winston, were honored with the 2023 Joseph "Bud" Haines Community Award from the Council on Chemical Abuse. The award recognizes "ongoing commitment to the prevention of substance use and abuse in the community." Parker, Van and Winston are co-presidents of the West Reading Campus Naloxone Outreach Project. The group expanded the project's outreach to include supplying and restocking boxes of naloxone to seven local businesses and organizations that are now known in the community as places where the life-saving drug can be acquired when needed.

Endometrial Cancer?" which was published in the International Journal of Radiation Oncology, Biology and Physics on September 1, 2023.

Rachel Berman, a Molecular & Cell Biology & Genetics PhD student, was awarded a Ruth L. Kirschstein National Research Service Award (T32) from Drexel University's Interdisciplinary and Translational Research Training Grant in NeuroAIDS, funded by the National Institute of Mental Health, for her project "Analysis of CRISPR/Cas9 as an HIV-1 Cure Strategy Using a Targeted sgRNA Library-Based Approach."



Danner



Simon Danner, PhD, assistant professor of neurobiology and anatomy, Natalia Shevtsova, PhD. research assistant professor of neurobiology and anatomy, Ilya Rybak, PhD,

professor of neurobiology and anatomy, and collaborators at University of Louisville published "Spinal Control of Locomotion Before and After Spinal Cord Injury " in Experimental Neurology on July 25, 2023. Sergey





Markin

Markin, PhD, research assistant professor of neurobiology and anatomy, Danner and collaborators at Dalhousie University published "Distinct Roles of Spinal Commissural

Interneurons in Transmission of Contralateral Sensory Information" in Current Biology on August 1, 2023. Shravan Tata Ramalingasetty, PhD, postdoctoral researcher, Andrew Lockhart, Neuroscience PhD student, and Danner, who is their mentor, gave invited talks on robotics and computational models of spinal locomotor circuitry at the Department of Mechanical Science and Bioengineering of Osaka University in Osaka, Japan, on June 5, 2023. Danner gave invited lectures at École Polytechnique Fédérale de Lausanne in Lausanne, Switzerland, on June 14, 2023, and at the Decoding the Organization and Regeneration of Locomotor Networks in Vertebrates meeting in Stockholm, Sweden, on June 29, 2023. Ramalingasetty received the Edward Jekkal Muscular Dystrophy Research Fellowship for his proposal "The Role of V3 in Sensorimotor Integration for Left-Right Coordination." The fellowship provides funding for two years in the amount of \$60,000 per year.



DeAntoneo

Carly DeAntoneo, a PhD student in the Molecular & Cell Biology & Genetics program, her mentor, Siddharth Balachandran, PhD, adjunct professor of microbiology and immunology (Fox Chase Cancer Center), and a colleague at InsideOutBio are the authors of "Z-Form

Nucleic Acid-Binding Protein 1 (ZBP1) as a Sensor of Viral and Cellular Z-RNAs: Walking the Razor's Edge." The paper appeared in the August 2023 issue of Current Opinion in Immunology. DeAntoneo received a Ruth L. Kirschstein National Research Service Award (F31, Diversity) from the National Institute of Allergy and Infectious Diseases for her project "Reovirus Z-RNAs Activate ZBP1 Dependent Necroptosis."



Megan Detloff, PhD, assistant professor, Department of Neurobiology & Anatomy, delivered a plenary talk, "Resolution of SCI-Induced Pain via Macrophages," at the National Neurotrauma Society Annual Meeting held in Austin, Texas, June 25-28, 2023. Detloff and a

collaborator at Clemson University were awarded a two-year basic science research grant from the Craig H. Neilsen Foundation for their proposal "Macrophage-Targeted Nanotherapeutic to Reduce SCI Pain."

Nicholas Duchemin, PhD molecular and cell biology and genetics '17, Ronak Loonawat, PhD microbiology and immunology '21, Kyle Yeakle, research assistant, Andrea Rosenkranz, Molecular & Cell Biology &



Bouchard, PhD, professor of biochemistry and molecular biology, authored "Hypoxia-Inducible Factor Affects Hepatitis B Virus Transcripts and Genome Levels as Well as the Expression and Subcellular Location of the Hepatitis B

Genetics PhD student, and Michael

Virus Core Protein" in the September 2023 issue of Virology.





Itzhak Fischer, PhD,
professor and chair,
Theresa Connors, instructor,
Julien Bouyer, research
assistant, and Ying Jin,
PhD, research assistant
professor, all in the

Department of Neurobiology & Anatomy, authored "The Unique Properties of Big Tau in the Visual System" in the July 2023 issue of bioRxiv. They also published "Regulation of Tau Expression in Superior Cervical Ganglion (SCG) Neurons In Vivo and In Vitro," in Cells on January 5, 2023.



Wen-Jun Gao, MD, PhD, professor, Department of Neurobiology & Anatomy, gave a talk, "Pharmacogenetic Activation of Parvalbumin Interneurons in the Prefrontal Cortex Rescues Cognitive Deficits Induced by Adolescent MK801 Administration" at the Symposium for

Regional FENS in Algarve, Portugal, May 3-5, 2023.



Peter J. Gaskill, PhD, associate professor of pharmacology and physiology, and colleagues at the San Diego Biomedical Research Institute, the University of California San Diego and Creighton Preparatory School authored "MRP8/14 Is a Molecular Signature Triggered by

Dopamine in HIV Latent Myeloid Targets That Increases HIV Transcription and Distinguishes HIV+ Methamphetamine Users With Detectable CSF Viral Load and Brain Pathology." The paper appeared in Viruses on June 13, 2023. Gaskill also received a new R61 grant from the National Institute on Drug Abuse. The grant will support a collaborative project, "Defining Molecular Mechanisms by Which Stimulant Evoked Dopamine Drives Inflammation and Neuronal Dysfunction in NeuroHIV," with colleagues from Drexel, the University of Florida and the University of Nebraska Medical Center.

Calendar

December 25 Christmas

January

- 1 New Year's Day
- DUCoM Classical Winter Concert
 7-9 p.m.
 Philadelphia Ethical Society
 1906 Rittenhouse Square, Philadelphia, PA 19103
 Contact: ducomclassical@gmail.com
- 15 Martin Luther King Jr. Day
- 27 Pediatric AIDS Benefit Concert
 5:30 p.m.
 Drexel University Main Building
 3141 Chestnut Street, Philadelphia, PA 19104
 Contact: ducomPABC@amail.com

February

- 12 AIDS, Posters and Stories of Public Health
 National Library of Medicine Exhibit
 Health Sciences Building
 60 North 36th Street, Philadelphia, PA 19104
 (On display until March 23)
- Drexel FIRST Health Equity Seminar Series
 11 a.m.-12 p.m.
 Speaker: Mahasin Mujahid, PhD, chair of epidemiology, UC Berkley School of Public Health Location TBA

March

15 **Match Day** Details TBA

Save the Date College of Medicine Commencement May 9, 2024

The Kimmel Center for the Performing Arts 300 S. Broad St., Philadelphia, PA 19102 Contact: DUCOMMilestones@drexel.edu

34th Annual St. Chris Research Day May 17, 2024

St. Christopher's Hospital for Children 160 E. Erie Ave., Philadelphia, PA 19134 Contact: Alma Barbarena, alma.barberena@towerhealth.org

Faculty Professional Development Day and Faculty Awards

June 6, 2024

Hybrid event:

In person at the Health Sciences Building, 60 North 36th Street Livestreamed via Zoom Contact: Caitlin Curcio, cak332@drexel.edu

Full calendar: All College of Medicine events are available at drexel.edu/medicine/news-events/events.

Alumni: For information about alumni events, please call toll-free 888.DUGRADS (888.384.7237), email medical.alumni@drexel.edu or visit drexel.edu/medicine/alumni/events.

WHAT WE'RE DOING





Laura Giacometti, PhD, postdoctoral scholar, Christine Side, Barker Lab research assistant, Kelsey Chandran, 2019 STAR student, Samantha Stine, MS drug discovery and

development '22, Lauren Buck, MS, Barker Lab manager, Rebecca Wenzel-Rideout, 2022 summer intern, and Jaqueline Barker, PhD, associate professor of pharmacology and physiology, authored "Effects of Adolescent Ethanol Exposure on Adult Nondrug Reward Seeking Behavior in Male and Female Mice," which appeared in Alcohol, Clinical and Experimental Research on July 12, 2023.

Arron Hall, a Neuroscience PhD candidate, received a three-year F31 fellowship from the National Institute of Mental Health for "Anterior Cingulate Cortex Preferentially Drives Dorsal CA1 Deep Neuronal Activity During Sharp-Wave Ripples for Memory Consolidation.'



Benjamin Haslund-Gourley, an MD/ PhD student in the Microbiology & Immunology program, was awarded the Goldie Simon Preceptorship to complete a summer project, "High-Throughput Method to Identify Lupus-Specific Autoantibody Glycosylation."



John D. Houle, PhD, professor emeritus, Department of Neurobiology & Anatomy, delivered the plenary lecture at the annual meeting of the International Spinal Research Trust in London, England, September 15, 2023. His talk was "A Long Path Towards Recovery of Function

After Spinal Cord Injury – 40 Years of Studying Protection, Regeneration and Rehabilitation in 40 Minutes."



Richard Huneke, DVM, executive director of University Laboratory Animal Resources and professor of microbiology and immunology, was appointed to a four-year term as the U.S. representative (through the American Association for Laboratory Animal Science) to the

International Council for Laboratory Animal Science. The council serves to harmonize laboratory standards worldwide, promote laboratory animal care and ethics, and provide training opportunities to developing areas around the world.



Pooja Jain, PhD, professor of microbiology and immunology, and collaborators received NIH funding (\$446,500 in direct costs per year) from the National Institute on Drug Abuse for a project that aims to develop whole tissue in situ hybridization for the detection of simian-human

immunodeficiency virus in non-human primate central nervous system-associated reservoirs. She also delivered two invited seminars: "Immune System Response to Infection and Inflammation in the CNS – Evidence Thru Live In Vivo Imaging," for the Department of Cell Biology at Albert Einstein College of Medicine in the Bronx, New York; and "Mechanistic and Therapeutic Aspects of Retroviral and Neuroinflammatory Diseases" at the Child Health Institute of New Jersey, Rutgers Robert Wood Johnson Medical School in New Brunswick, New Jersey.

Julie Joseph and Abhishek Rao, Microbiology & Immunology PhD students, Shrobona Guha, MS,





Carey

Neuroscience PhD student, Alison J. Carey, MD, associate professor of pediatrics, and microbiology and immunology, Jain, and colleagues from Weill Cornell Medical College,

Walter Reed Army Institute of Research, Oak Ridge Institute for Science and Education and the Ohio State University published "Retroviral B-Zip Protein (HBZ) Contributes to the Release of Soluble and Exosomal Immune Checkpoint Molecules in the Context of Neuroinflammation" in the July 2023 issue of the Journal of Extracellular Biology.

Jain and colleagues at the Ohio State University and the University of Colorado School of Medicine also authored "The Pleiotropic Effects of YBX1 on HTLV-1 Transcription," which appeared in the International Journal of Molecular Sciences on August 23, 2023.

Alexander Kirichenko, MD, PhD, professor of radiologic sciences, Tadahiro Uemura, MD, PhD, professor of surgery, **Yun Liang, PhD**, assistant professor of radiologic sciences, Paul Renz, DO, assistant professor of radiologic sciences, Jennifer Carpenter, MD, assistant professor of surgery, and colleagues at Allegheny Health Network and the New York Proton Center authored "Stereotactic Body Radiotherapy (SBRT) for Hepatocellular Carcinoma (HCC) With Single Photon Emission Computed Tomography (SPECT) Functional Treatment Planning in Patients With Advanced Hepatic Cirrhosis" in Advances in Radiation Oncology on August 31, 2023.



Margaret Larkins-Pettigrew, MD, MEd, MPPM, professor and academic chair of the Department of Obstetrics & Gynecology, and senior vice president and chief clinical diversity, equity and inclusion officer at Allegheny Health Network/Highmark Health, was one of

four health care leaders nationwide to receive Modern Healthcare's 2023 Diversity Leaders Luminary Award.

Jill Lawrence and Kayla Schardien, both PhD students in the Molecular & Cell Biology & Genetics program, Brian





Nonnemacher

Wigdahl, PhD, professor and chair of microbiology and immunology, and Michael R. Nonnemacher, PhD, professor of microbiology and immunology, authored "Roles of Neuropathology-

Associated Reactive Astrocytes: A Systematic Review," which was published in the March 13, 2023, issue of Acta Neuropathologic Communications.

Danny Lee, PhD, assistant professor, Seungjong Oh, PhD, assistant professor, Min-Sig Hwang, PhD, assistant professor, Daniel Pavord, MS, assistant professor, Jason Sohn, PhD, professor, Athanasios Colonias, MD, assistant professor, Mark Trombetta, MD, professor and interim academic chair. Alexander Kirichenko, MD, PhD, professor, and Paul Renz, DO, assistant professor, all in the Department of Radiologic Sciences, presented "Stereotactic MR-guided Adaptive Radiotherapy for Pancreatic and Other Intra-abdominal Cancers on a 1.5 Tesla MR-Linac System" at the International Society for Magnetic Resonance in Medicine/International Society for MR Radiographers & Technologists annual meeting, which was held in Toronto, Canada, June 3-8, 2023. Lee, Renz, Oh, Hwang, Pavord, Trombetta, Kirichenko and Colonias also presented "Online Adaptive MR-Guided Stereotactic Body Radiotherapy for Pancreatic and

Future Clinician-Scientists Excel in NIH Research Program

Two fourth-year MD students participated in the NIH Medical Research Scholars Program, a yearlong research immersion program for future clinician-scientists. The program allows scholars to research under the mentorship of an NIH investigator of their choosing, while also participating in a complementary professional development and leadership curriculum.



Emma M. Byrne, MD '24, conducted research under the mentorship of Mark R. Gilbert, MD, chief of the Neuro-Oncology Branch of the National Cancer Institute. Byrne's project was "Differentiating Pseudo-Progression

From Progression in Immunotherapy-Treated Primary Brain Tumor Patients: A Diagnostic Dilemma." Anirudh Rao, MD '24, conducted research at the National Heart, Lung, and Blood



Institute under the mentorship of Andre Larochelle, MD, PhD, an investigator in the field of regenerative therapies for inherited blood disorders in NHLBI's Hematology Branch. Rao's project was "Dendrimer-Based Lipid

Nanoparticles for Efficient, Low-Toxicity Gene Editing of Human Hematopoietic Stem and Progenitor Cells."

Other Intra-abdominal Cancers" to the 17th Elekta MRL Consortium in Amsterdam, Netherlands, June 14-16, 2023. Oh, Trombetta, Sohn and colleagues at Allegheny Health Network published "Stereotactic Ablative Radiotherapy in Ventricular Fibrillation With Left Ventricular Thrombus" in Heart Rhythm Case Reports on September 27, 2023.

Anna Lilly, a PhD student in the Molecular & Cell Biology & Genetics program, Erica Golemis, PhD, assistant professor of biochemistry and molecular biology (Fox Chase Cancer Center), and a Fox Chase Cancer Center colleague published "Intrapancreatic Fat, Pancreatitis, and Pancreatic Cancer" in Cellular and Molecular Life Sciences on July 15, 2023.



Xuan Luo, MS drug discovery and development '19, now a PhD student in the Pharmacology & Physiology program, earned a Dean's Fellowship for Excellence in Collaborative or Themed Research from the Graduate School of Biomedical Sciences and Professional Studies. The

funds will support Luo's research in the Ajit Lab on how small extracellular vesicles resolve pain via epigenetic mechanisms.







Cydney Martin, a secondyear PhD student in the Neuroscience program, presented a poster at the annual meeting of the National Neurotrauma Society held in Austin,

Texas, on June 25-28, 2023. Her poster, "Stress-Related Neuropeptides May Mediate Sex Differences in Depressive-Like Behavior Following Repetitive Mild Traumatic Brain Injury in Adolescent Rats," was coauthored by Jessica R. Barson, PhD, associate professor of neurobiology and anatomy.

Victoria Mischley, a Molecular & Cell Biology & Genetics PhD student, received a Ruth L. Kirschstein National Research Service Award (F30) from the National Institute of Biomedical Imaging and Bioengineering. Mischley's project is "Developing Computational Methods to Identify Endogenous Substrates of E3 Ubiquitin Ligases and Molecular Glue Degraders."



Mark Namba, PhD, postdoctoral scholar, Qiaowei Xie, MS, Pharmacology & Physiology PhD student, and Jaqueline Barker, PhD, associate professor of pharmacology

and physiology, published "Advancing the Preclinical Study of Comorbid NeuroHIV and Substance Use Disorders: Current Perspectives and Future Directions" in the October 2023 issue of Brain, Behavior, and Immunity.

WHAT WE'RE DOING



Mitch Nothem, PhD pharmacology and physiology '20, postdoctoral scholar, Department of Pharmacology & Physiology, received funding from Drexel's Medical Cannabis Research Center for his project "Investigating the Analgesic Potential of Cannabidiol

Combinations for Chronic Neuropathic Pain."

Ashley Opalka, a Neuroscience PhD candidate, received a 2023 Dean's Fellowship for Excellence in Collaborative or Themed Research from the Graduate School of Biomedical Sciences and Professional Studies.



Ramesh Raghupathi PhD, a professor in the Department of Neurobiology & Anatomy, chaired two symposia at the annual meeting of the National Neurotrauma Society held in Austin, Texas, on June 25-28, 2023. The first symposium was "Let's Talk About Sex:

Sex Differences in CNS Trauma"; the second was "The Influence of Early Life Adversity on Outcomes After Traumatic Brain Injury." Raghupathi also presented data during each symposium.



Mauricio Reginato, PhD, professor and interim chair, Department of Biochemistry & Molecular Biology, served on the National Institute of Health Clinical and Translational Science Awards Program Career and Training Grants Review panel. This panel reviews K12, T32 and R25

institutional training grants.

In Memoriam

David A. Major, MD, HU '64, died on September 9, 2023, at the age of 84. Major earned his undergraduate degree from Cornell University and then spent two years in the Army before matriculating at Hahnemann Medical College. He later served as a professor and director of the Division of General Internal Medicine at Hahnemann. In 1971, when the vocation of physician assistant was only a few years old, he co-founded the Physician Assistant program at Hahnemann with Wilber W. Oaks, MD, HU '55. The program now resides within Drexel's College of Nursing and Health Professions. It was the first of its kind in Pennsylvania. Major also co-founded Ninth Street Internal Medicine in 1990, where he served as a dedicated clinician, educator and mentor until his retirement in 2022. He is survived by his wife, Evelyn; daughters Jill, Jane and Lynn, and their partners; granddaughters Noa, Mira, Valerie, Marly and Sebina; and sister Maxine.

Aniruddha Singh, MD, assistant professor of medicine, Drexel University College of Medicine at Tower Health, has been appointed to the American Board of Internal Medicine's Cardiovascular Disease Traditional, 10-Year MOC Exam Approval Committee.



Srinivas Somarowthu, PhD, assistant professor of biochemistry and molecular biology, received an R01 grant from the National Institutes of Health for his project "Structural and Functional Studies of IncRNAs in Gene Activation."



Daniel Taylor, DO, associate professor of pediatrics, authored an expert opinion piece for the *Philadelphia Inquirer*, "In Philadelphia, Babies Are Also Victim to the Opioid Epidemic," in which he describes the increase in patients St. Christopher's Hospital for Children has recently seen

for exposure to opioids, including infants exposed in utero, and infants and young children exposed by other means.



Rhea Temmermand, Pharmacology & Physiology PhD student, won the best poster award at the International Congress on Neuropathic pain (NeuPSIG2023), which was held in Lisbon, Portugal, from September 5-9, 2023.



Tara Tronetti, MD '25, received an honorable mention in the Gold Foundation's 2023 Hope Babette Tang Humanism in Healthcare Essay Contest. Tronetti's essay was titled "Sorry for the Mess!"

Rodney Wegner, MD, assistant professor of radiologic sciences, and Matthew Shepard, MD, assistant professor of neurosurgery, were among the authors of "Intratumoral Hemorrhage in Vestibular Schwannomas After Stereotactic Radiosurgery: Multi-Institutional Study" in the August 15, 2023, issue of Neurosurgery. Wenger and Allegheny Health Network colleagues authored "Survival Benefit with Re-resection and Optimal Time to Re-resection in Gallbladder Cancer: a National Cancer Database Study," which was published in the Journal of Gastrointestinal Cancer on May 25, 2023. Shepard, Wegner and Joseph Crooks, MD '25, published "Treatment Trends in Brain Metastases From Testicular Cancer in the United States" in CNS Oncology on August 31, 2023.

Jason Wheeler, MS, and Nichole Yakas, MS, Neuroscience PhD students, were awarded highly competitive trainee fellowships through the Graduate Training in Spinal Cord Injury T32 program. This program, funded by the National Institutes of Health, offers a rich and unique training experience that encompasses research methods and clinical perspectives in the field of spinal cord injury.

Get to Know...

What is your official title at Drexel?

Program Director, Office of Community Engagement (OCE), College of Medicine

Explain what you do in under 50 words.

My job is to connect future health professionals to community sites so they can learn from community members and understand that health is so much larger than just not coughing. The scaffolding for those connections includes two courses, a summer internship, volunteer opportunities and the Health Outreach Project clinics.

Have you ever wished you could make up a more accurate title for yourself? If so, what would it have been?

"Door Opener." I am often not "in the room where it happens" where students are engaging with community members and site personnel. But I prepare the way, brainstorming and planning with sites, communicating possibilities with students, and helping to connect all parties with a vision and a schedule. That's when the magic happens. I just open the doors.

Who do you interact with most on a daily basis?

I work closely with a great team in the OCE: Steve Rosenzweig, MD, Laura Mullin and Sammy Brink. Along with first- and second-year medical students, I am also frequently engaging with leaders in community sites (schools, social service, educational and health organizations), as well as with colleagues across the University.

What is your typical day like?

I am often in meetings (in-person and Zoom), or preparing for meetings, or inviting people to meetings. I like to start my days early — which is usually when I send out and answer a lot of email.

How do you see your work fitting into the big picture of the missions of the College?

President Fry has always envisioned and supported Drexel to be the most civically engaged University. My work fits with the work of so many others at the University in establishing ties between our students and community programs, building relationships that help further the work of those sites while, at the same time, our students are gaining skills, confidence and understanding.

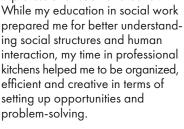
What are your favorite and least favorite tasks?

I love meeting with new sites and crafting a mutually beneficial connection based on their goals and our students' strengths. I love reaching out to community sites with whom I've been in partnership over many years. I love introducing students to innovative community partners, and community partners to students. My least favorite tasks include organizing my desk and taking care of bureaucratic duties.

What is your educational and previous work background? How did those prepare you for what you do now?

I have a master's degree in social work — but between undergraduate and graduate school, I was

a professional cook and baker.



When you are working on site, do you bring your own lunch or eat out?

I usually bring my own lunch. Now that we have moved to the Health Sciences Building, that is a more challenging commitment (given all the great restaurants nearby), but having my own food is more economical and quicker.

What's a piece of media you enjoyed or that really made you stop and think?

I recently finished reading Demon

Copperhead, by Barbara Kingsolver. Actually, I'm not sure if "reading" is the right verb, since I sort of consumed it. The story takes place in a rural community in the Appalachian Mountains of Virginia, an area that has suffered from the opioid and methamphetamine crises. Kingsolver's characters are written as full, complicated people. The novel gave me insight and greater empathy for a part of the world I know little about.

Is there a piece of Philly culture that you return to over and over again?

Any hoagie on a Sarcone's hoagie roll. When I first moved to Philly from the West Coast, I remember biting into a hoagie with broccoli rabe, roasted garlic, feta cheese and pepperoncinis and thinking, "This is why we moved across the country."



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